



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

the appearing, and the more clearly seen by so much as the expression has been the more sharply cut. And it is just here that so much has been done for future Platonic questioning. The physics and metaphysics studied and taught under Aristotelian masters have made both matter and mind a plainer book now, for reason, than Plato ever had in hand. What of fact physical science is gaining in the modern doctrine of the conversion and conservation of forces, and what especially German logic and dialectic have discovered in profound abstract thought, have opened wide occasion for expounding the connections of phenomena and idea, and idea with idea, in ample plainness and fullness, that until his death remained dark and unsatisfactory to Plato. But much as Platonism owes to Aristotelian dialectic, the latter begins and ends within the natural, while the former only can *a priori* know the supernatural; and sure as the ages the time is coming, when every logical grist shall be carried to Plato's old mill, and there together all be ground in one logic and one dialectic, which will make of all the one Philosophy.

HERBART'S IDEAS ON EDUCATION.

Translated from the German of Dr. KARL SCHMIDT* (*Geschichte der Pädagogik*), by, HUGO HAANEL.

John Frederick Herbart was born the 4th of May, 1776, in the

*Dr. Karl Schmidt's sketch of Herbart's Pedagogics is herewith presented with notes designed to prepare the way for a review of Herbart's system, which may appear in a subsequent number of this journal. These notes have been added with a view to compare Herbart's views with those of other systems better known, and thereby interpret them. Though the additions to the text are not only quite free, but, at times, imply criticism, the general connection of the remarks will bear evidence that they have been conceived in the spirit of Herbart's arduous undertaking to make the formation of moral character the aim and end of public education. The text and the comments being separated by brackets, the latter may be disregarded without much inconvenience.—[TRANSLATOR.

city of Oldenburg, where he received his collegiate education, and exhibited a much stronger inclination for investigation than for erudition. In 1794 he attended the University of Jena, joining the law department, but studying philosophy under Schmid, Reinhold, and Fichte for three years, when he became private tutor in Switzerland. He was admitted as academic lecturer into the University of Goettingen, 1802; went as Professor of Philosophy to Koenigsberg in 1809, and returned as such in 1833, to Goettingen, where he died August 14, 1841. Herbart has paid more attention to pedagogics than any other philosopher; in fact pedagogics was the aim and end of his best efforts in psychology. He says himself: "I have summoned and kept employed metaphysics and mathematics in addition to self-observation, experience and experiment for the space of twenty years, that I might discover the foundation of true psychological knowledge. The cause of these not very easy investigations was chiefly, and still is, my settled conviction that a large share of the tremendous gaps in our pedagogical knowledge is attributable to defects in our psychology, and that we first have to possess the latter science; nay, first of all, that we have to do away with the illusion called psychology at present, before we are able to pronounce with any degree of accuracy whether a single lesson has been taught well or otherwise."

The chief works resulting from Herbart's practical interest in pedagogics are:

- (1) "Pestalozzi's Primary Principles (*Idee eines A,B,C,*) of Object Lessons (*Anschauung*) Developed Scientifically (*wissenschaftlich entwickelt*) into a Course of Preparatory Training (*Voruebungen*) for Perception of Form. 1802."
- (2) "General Pedagogics Deduced Scientifically from the Aim and End of Education." 1806.
- (3) "Concerning Public Co-operation in Matters of Education." 1810.
- (4) "Relation Between Idealism and Pedagogics." 1831.
- (5) "Sketch of Lectures on Pedagogics." 1835.
- (6) "Letters Concerning Psychology Applied to Pedagogics"—(fragments).

All these works have their deepest root in the "Text-book of Psychology," and "Psychology as a Science, Founded in a New Manner upon Experience, Metaphysics and Mathematics."

Herbart considers an outside influence upon the person under

age necessary in order that he may grow mentally in the same [continuous] manner as he does physically, because he (Herbart) maintains, as a principle of his psychology, that there are by no means fixed, predetermined capacities in the human soul, similar to those in plants and animal bodies; that man—only as far as his body is concerned—brings his future form with his germ into the world; *that the human soul on the contrary, resembles rather a machine entirely constructed out of perceptions.** [The impressions furnished by circumstances being without order or plan,] a systematic education has to nurture the mental capacities of the pupil and thereby save them in [for and against] a world from which they neither can nor should be isolated, and to train them to a conscious attitude of moral freedom. [All] possibility of education involves the fact and idea (*Begriff*) of a plastic nature (*Bildsamkeit*) exhibiting a transition from something indefinite to a fixed form (*Festigkeit*.) The aim of education is the harmonious development in manifold directions of spontaneous activity, subordinated to moral culture. "Let each one be an amateur in all things, but let each one be master in one branch of business," is a fundamental principle of Herbart.

*This should read: That the human mind may be made to resemble an organism, but under different circumstances with very different degrees of perfection, and that this mental organism or system is created by the soul out of the material furnished to the senses. Herbart holds that the soul is active, not passive, in forming perceptions out of the momentary sensations of color, sound and the like, that these elementary sensations are reactions of the soul, corresponding to outside influences; that we know nothing of soul, self, or faculties, save what we have learned by induction from the works of the human mind, that other faculties—being likewise the result of work and comparison—may be produced purified and strengthened but in no other manner than by induction, and that the faculties both as regards their separate functions and their joint operation, will approach the closer to the perfection of a living organism, or of the system of mathematics, or of a machine, the more thoroughly we use our energies in the removal of definitely given difficulties and the solution of definitely given problems, first and before such application is followed up by broad and exhaustive comparison with other objects operated upon by the same energies of the soul; whereas a psychological theory which rests satisfied with a number of disconnected faculties for an ultimate basis, to the neglect of their unity in application, and without inquiring into the cause of their unity in the soul, is apt to unfit man for the business of life, and at best to degrade him to the rank of a laborer, whose sense of freedom, and natural enthusiasm for unity in the different departments of society is reduced to smoking embers.—TRANSLATOR.

Pedagogics is, according to Herbart, closely connected with ethics and psychology; it really depends upon both. He commences by showing that pedagogics depends upon ethics, and proves [indirectly] that those opinions are erroneous which do not let the process of education begin and continue as well as terminate in the individual subject, but which place the pupil in such a relation to certain ideal objects (happiness, usefulness, family, State, humanity, God) that the future actions of the individual are defined by such objects as the end and aim of education. This proceeding has to be reversed, and it must be maintained that the individual person is and remains the exclusive and true centre for the purposes of education. Nothing of an objective nature has to be fixed in such a manner that value and safety is transferred to the actions of the individual from outside, but on the contrary, any and every kind of objective reality receives [all] its importance and value from the individual person, and if such importance has been attached to it already, it will not be recognized or assimilated unless it is found to be consonant with the highest standard of individual endeavor and action. It is thereby not denied that humanity, age, State, family, mean great things, but it is not permissible to hold up any one of them as the one ideal standard; they are alike parts of a system centring in him whose idea of right is realized in his individuality. This realization is morality or virtue, and [if] concentrated and embodied [in the idea of self] it is personified force of habitual morality (*Characterstaerke der Sittlichkeit*).

Pedagogics, according to this principle, should be defined as the sketch of a plan designed by means of ethics for the realization of the latter, and executed under the presupposition of a systematically artistic activity in individuals, necessarily supposed to be susceptible of its influence.

[The part which ethics perform in Herbart's system, and especially in his pedagogics, may be explained briefly by comparison with the corresponding views of Hegel.

Hegel and Herbart agree that the chief end of education is to raise the individual to fixed habits of subordinating all to moral activity; neither of them proposes to attain that end by the explanation of moral texts; the spirit of their systems is evidently in emphasizing correct habits of methodical observation and work, which, at the age of mature reflection, may be employed in the culture of our moral self, directly and systematically; both

undertake to educate by means of instruction, and to develop the moral judgment of the individual while it is assisted in taking possession of the indispensable results and conditions of civilization. They further agree that the life of the individual owes fruitfulness and scope to society, while unity and harmony of the departments of society rest upon the moral strength of the individuals, and furthermore that the perpetuity of life, whether of society or of the individual, depends upon the "idea," if we understand by the term "idea" the consciousness of the necessary conditions of such perpetuity. We may therefore conclude that if Hegel had elaborated pedagogics himself, the speculative problem would have been for him as it was for Herbart, how to realize the "idea" within the province of education. Now, though Hegel subordinates everything to one absolute idea, while Herbart co-ordinates his five ideas, viz : Freedom, Perfection, Right, Equity and Benevolence, it is nevertheless not difficult to harmonize the latter five with the one absolute idea, for practical purposes. For, whereas complementary opposites are equally necessary to life, and the knowledge thereof to responsibility: non-interference between such co-ordinate powers constitutes the basis of rights; compensation in proportion to the number of complementary opposites united in any purpose and multiplied by the number of actual repetitions, constitutes equity of reward and punishment; both, Rights and Equity limited to the domain of intention and spiritual intercourse, i. e., where the assistance of physical organs and forces is precluded, constitutes Benevolence, the principle of morality in contradistinction from those applications of Rights and Equity which may be enforced; the agreement between intention and action, both being governed as stated above, constitutes individual Freedom. All subordination is governed by the relative term Perfection. Setting aside differences of quantity, any one of the complementary opposites is imperfect as compared with their unity; the richer unity is perfect in comparison with the object embodying a less number of complementary opposites. But whatsoever severs that which is jointly necessary for life, liberty and happiness, actually and with the intention of keeping it severed, is physically bad, legally wrong, spiritually untrue, and morally sinful.

The general manner in which Herbart facilitates the application of the above practical (ethical) ideas, is termed *aesthetical judgment*. The statement: "It pleases," as to the harmony of

colors, sounds, tastes, the symmetry and proportion of forms, the exhibition of unity in variety by the works of nature and of man, is a judgment only in appearance, but in fact an inference, the major premise of which is a fixed, *a priori*, though unconscious relation of complementary opposites, outward or inward experience furnishing the middle term. The introduction of inventive dialectics into schools in such a manner that the scholar should discover for the elementary forms of drawing their counterparts, symmetrical to an axis or a centre (inventive drawing), or for the definite qualities of objects as to form, size, number, color, sound, use (object lessons) their opposite qualities and the objects corresponding to their varied combinations (lessons on natural science); or, for the geographical conditions of one place, the opposite conditions and the commercial reciprocity of exchange (physical geography); or for the given grammatical combinations of number, gender, case, voice, tense, mode, &c., their corresponding opposites (elements of composition), or for the algebraical expression the geometrical construction (analysis)—these and the like obvious applications of inventive dialectics cannot be attempted directly, but every master of a specialty prepares his scholars by means of the æsthetical judgment. He writes, draws, sings, speaks, reasons well, i. e., embodies the harmony of opposites in his work; its perfection pleases because it is agreeable to true human nature, the pleasure stimulates imitation, successful imitation develops into knowledge of the method, and critical application of the method to works of art and nature widens, by means of classical education, into “æsthetical conception of the world”—the goal of Herbart’s pedagogics].

Pedagogics depends not less upon psychology [than it does upon ethics]. Ethics may point out the goal of education, but they cannot decide as to the connection between the general method and the given individuality to be educated, nor as to the probability of success. All that is business belonging to psychology, [namely] to that science which treats in general of the internal constitution of substances which are the foundation of things that appear.

Psychology, (Herbart’s), teaches that the soul is a simple substance, indivisible by physical forces, and not liable to any change of its identity; pedagogics should not, therefore attempt to treat the human soul like impressible matter to which every possible impression might be given. And no more

are we permitted to conceive the soul as changing its identity in time (*Werdendes*) than we are allowed to admit a change of the internal constitution of the soul at any moment; the soul is what it is [retains its nature] absolutely and perfectly, and is and remains this identity (dies) always, unmodified by differences of quantity. The soul is the real, unchangeable, concrete centre of all conscious activity whatsoever (*Vorstellungen*), which latter, being susceptible of change, may assume all these forms, the totality of which is called Mind and among which [conscious products] we find even the conception of Self (*Ichheit*).

[Herbart demands as an act of justice to himself, and repeatedly, that such a construction should be put-upon his words as may be obtained by a comparison of all his works. This is not easy to be done with reference to the doctrine of the simplicity of the soul. This theorem has its proper place in his metaphysics as basis for a philosophy of nature; it may, therefore, be permissible to construe simplicity as unity indivisible by physical forces; for he admits that the mind may distinguish between the various actions of the soul, that the latter are different, according to the various objects acted upon, that difference of quality is the principle of physical attraction, that all attraction does not end when substances touch each other, but that it may continue until one occupies the place of the other, that millions may be absorbed by one, that the substances have an internal constitution or permanent relation of qualities necessarily joined which act as a unity in case of self-preservation against outward forces. This and much more cannot be understood unless the simplicity of a soul endowed with the above practical ideas, means concrete unity. On the other hand, if such a rendering is allowed, we think that his views are not only plain but may be illustrated by every equation above the first degree].

The opinion, according to which a certain [and fixed] number (*Anzahl*) of higher and lower faculties are ascribed to the soul, is a psychological myth.

[The enumeration of faculties in psychology is as faulty as the mythology of Greece. Neither in these gods nor in these faculties is there to be found harmonious co-operation, well defined subordination to ethical ideas, or help for the practical concerns of life; both the gods and the faculties are imperfect productions of the mind. All those gods are in every human breast, all the faculties in every thought. Extraordinary strength of faculties

may be explained by greatness of purpose, i. e., objective unity of faculties and zealous purity of character (subjective unity of faculties) both being curtailed by given circumstances].

Everything which enters our mind [appears to] act as a force, on account of its contradictory or complementary qualities with respect to other matter of thought with which it is connected by means of [in] the soul, and the effect is considered as [the result of reaction against some] interference which may be more or less transient, reciprocal and extensive. The general activity in the great variety of thoughts is thus accounted for, but it is also evident that categories, unities of categories according to their complementary relation and different degrees of application of both these primary and higher faculties [Psychology, Complete Works, Vol. VI., p. 361] will be produced, from the fact that the relation of opposition is different in degree, existing in part only with reference to some, being entirely absent with regard to other perceptions, and that [therefore] the material will be dialectically graduated and concatenated from extremes towards the centre, (a scale of electro-positive and negative bodies): and lastly that these [ideal chains of things] will be interwoven in consequence of identical or similar links. The thinking, feeling, and perceptive activities, are nothing but the same general action of the soul to preserve its identity limited in different ways; they are, as such limitations, solely [subjective] relations among that which is real: [but] consciousness is the totality (*Summe*) of such relations existing between the soul and other substances. These relations, and the corresponding acts of consciousness not being of equal intensity, some of them [may and] do interfere with, oppose, [or] throw into shadow others; those which are suppressed, keep waiting at the very threshold of consciousness until they are at liberty to arise again, when they associate with cognate perceptions and press onward with united strength. Such associations [temporarily] repressed, but continuing to act with the least degree of distinct consciousness, and working in the dark [as it were], are denominated *feelings*. A somewhat higher degree of action is termed *desire*, namely, when the work of assimilation is more or less successful. Desire develops into *will*, when supported by probability of success. That which we call imagination, memory, understanding, desire, reason, will, and-so-forth, in popular phraseology, and whatever other [mental operations] are supposed to be, and are introduced as primary faculties of the

soul [in addition to metaphysical categories and mathematical operations] are nothing but a certain activity observed in, and limited to (*vorhanden*) a definite number of intellectual facts systematically connected—the correlation of stages of mental action with reference to the same or different objects.

[The faculties of psychology are secondary faculties; they cannot be influenced directly; they can be affected only by means of the primary faculties, or categories; the latter are always ready for action and require nothing but to be directed; their union the soul controls, by means of the co-operation of the physical organs, and more especially the correlation of eye and ear by means of language and mathematics].

The [general] question, how any kind of education is possible, [how man may transfer his remembrance, imagination, will, self-consciousness by means of sound, form or color,] necessarily presupposes that certain processes are going on in the mind of the pupil, though without distinct consciousness, which the educator must have it in his power to control though with certain limitations, and he can direct his action only upon the co-operation of these primary actions, but not upon their real unity from which they proceed, and which as soul we conceive to be the unchangeable foundation of conscious life, [nor] upon the rich variety of intellectual events resulting from the association of primary faculties which gradually unite, multiply, improve or deteriorate, and which exhibit the predominant functions in which the operations characteristic of human nature are perceived. Pedagogics can reach a satisfactory degree of scientific generality and applicability only by means of true psychological knowledge, and it is only by this means that education as a profession will take rank among the fine arts. Psychology accounts [also] for the causes which render minds vascillating between error and truth, between that which is good and that which is bad, and convinces us that there is a natural demand for education, and that education is a matter of necessity. The application of pedagogical means attains scientific accuracy and connection, the [entire] business of education attains unity and systematic use from Psychology alone.

The complete work of education may be divided into discipline, (*Regierung*), instruction, (*Unterricht*), and training, (*Zucht*). The child comes into the world without ability to concentrate the action of his organs upon one object, to the exclusion of the rest;

his individual will is the result of practice; this gradual result is interrupted by all manner of disordered inclination; to hold the latter within proper bounds, is the office of discipline. What experience and society teach, outside of school, is too one-sided and desultory, it is disconnected and fragmentary: a systematic activity must supervene which is able to complement, to digest and to unite the material collected as a mere aggregate. This methodical business, complementary of experience and society, is instruction. The term training (*Ziehen, duco, educo, education*) contains allusion to that which is not yet existing [the harmony of opposites controlling insubordinate tendencies] something hoped for [the strength of the complementary opposite, now being weak in the individual] which exists only as purpose, and toward which the pupil has to be led: this action, devoted more especially to the culture of the will, but also, in part, to knowledge and understanding is designated by "training."

1. It is the office of discipline to keep order, and to subject the naturally predominant and unruly inclinations of the individual. Such subjection has to be effected by a power strong enough, and acting so frequently as to be completely successful, before indications of a genuine will [persisting in wrong] are exhibited by the child. Measures within the reach of discipline are: (a) to keep the pupil so busy that he can find no time for mischief; (b) detective supervision which, however, is useful only during the first years of life, and during periods of special danger; (c) commanding and forbidding, with respect to which great caution has to be exercised, lest discipline be rather weakened by it; (d) threats and punishments, which must be superseded by respect and love, wherever possible. Discipline, [assisted by physical means] has, at all events, to cease long before training ceases, and should, as soon as possible, be relieved by the latter. The [apparently] limiting power of discipline [resembling the restraint of prison] cannot be discontinued so long as great temptations are offered to the pupil by his surroundings.

2. Instruction ought to be and must be educative: the aim of instruction should not be solely, or even predominantly, the amount of knowledge, nor should it be the acquisition of merely technical skill, but culture of the Personality [executive ability for ethical ideas]; this most essential part of education should be rooted and grounded. To be more definite, instruction is methodical production and culture of representations of objects

[as definitely constructed applications of the categories and ethical ideas], such representations being the true germs from which to develop the unity of all faculties until said elementary unities of object and subject seem to assimilate subordinate facts with spontaneous rapidity, embracing the complementary opposites in such an exhaustive manner that executive ability and energy for action are the direct result, as well as tact or [more generally] the quick decision as to the ethico-aesthetical value of a given fact.

The operations of the soul which are performed both with and without distinct consciousness (*psychisch*), have to be studied to solve that problem. Attention is, among these psychical operations, one of the most important, and a correct theory thereof a momentous question for pedagogics. Attention is [accompanied with consciousness of the relations between the object and the aims of the person, or it is not; it is] either artificial or natural. Intentional attention, produced by conscious direction of the will, or by aims more remotely subserved, or by the directive power of the teacher, transferred by his methods of discipline and training, is more especially required for [unprejudiced reception of facts by] observation and memorizing, though it is of less importance for the theory of culture on a large scale [as observed in the onward march of history]. Unintentional or natural attention has to be divided into primary and apperceptive attention. The former exists, when notice of a fact (*Vorstellung*) [appears] to work of itself and for itself [by means of its antithetical novelty]; the latter exists when the action [of the consciousness of the object upon the subject which, for the time, is unconscious of his operation] is supported by correspondence with expectations *a priori*. The following four rules are of use with reference to primary attention: Let the sensuous objectivity have a sufficient degree of intensity; the exhibition of the real object, and, if the latter cannot be had, a picture thereof is to be preferred to the combination of categories embodied in the construction of sentences without the help mentioned. 2. Excess, however, in quantity and quality of that which is novel [compared with what is known] is to be avoided, lest the susceptibility [unconscious-synthetical action] might be discontinued too soon. 3. Instruction [i. e., the operation of construction, conscious in the teacher, unconscious in the pupil] must be careful not to heap that which has to succeed [the more concrete] upon that which has to pre-

cede [the complementary opposites] too fast; the subject matter has to be analyzed, factored and the corresponding parts of opposition have to be fixed step by step. 4. The teacher must allow well selected periods of review, before presenting to the perceptive function difficulties of a higher order, in which the diffusive richness of the newly acquired material may be digested symmetrically.

When the mind is apperceptively attentive, the new matter is assimilated directly [though unconsciously] by previous habits of thought, and is intelligible and interesting on account of such relation.

[To understand thoroughly] the action of the mind in the construction of objectivity, it is of chief importance to perceive the correlation between the unity of the categories in the object (*Vertiefung*, adding depth, third dimension, perspective-centre, self-forgetfulness) and the unity of the categories in the subject (*Besinnung* : *sinn*=sense; *sinnen*=using senses in matter of memory; *nog*=according to their correlation; *Be*=jointly: methodical recollection). The more exclusively the pupil forgets himself in such objects as are agreeable to his idiosyncrasies, the more danger there is that every fact will be distorted: [culture of] self-recollection must, therefore, alternate with that of self-application. Personality is rooted in the unity of conscious actions, [which proceed either without reference to past and future or with reference to both, and are, therefore, either] presence of mind (*Sammlung*) or methodical reflection (*Besinnung*). Both operations preclude, as such, and for the time being, self-forgetfulness in the object (*Vertiefung*); the former have, nevertheless, to be united in the latter [to-wit: by the stages of speculation, where, by suppression of self, and projection of the faculties into the object, objectivity becomes conscious embodiment of the powers of the subject, as far as in activity]. If the acts of attention concentrated upon objects never unite in the attention bestowed upon the subject, the objects remain disassociated for general purposes, and the individual is inattentive; if the objects unite on account of their relation to the person, but the conscious factors of personality by which objects have been analyzed is not exhaustive, and their unity, therefore, weak, though without contradiction of the parts, the individual becomes one-sided. Ethical self-forgetfulness proceeding with freedom from predilections

and selfish aims, projects the distinctive particularity in relief. The progress from one act of objectivation to the next [complemental of the preceding], is the cause by which the results are associated, and the reciprocal reproductions arising among the multitude of associations, are personified as imagination; the latter [seems to] perceive the complementary relation (*schmeckt* = tastes) of every mixture, and ought not to reject anything [whether real or imaginary] except what is insipid, [the superfluous repetition of identity]. The undisturbed concentration of freedom seeks objective unity; the undisturbed self-recollection of freedom seeks the [genetic] relation of the several orders [and to comprehend] every single thing as organ located among the associations according to its intrinsic capacity. The rich organization of a rich genetic construction is called system. The upward step of genetic construction is called method; it is by means of the method that we sweep through the system of thoughts, in order to produce new constructions, and to watch over the consistency of its application [when the latter presents itself with seeming spontaneity].

Building upon such knowledge and such motives of action as have been prepared by experience and society outside of school, instruction has now to offer material of importance for the operations mentioned; for it is such material [only] that objective attention has to complement and subjective attention has to survey. Matter of interest may be divided [by our concern for things and persons] into matter important to be known and matter important to be concerned about [*Theilnahme*—participation.] Facts of interest derive their value either from the novel varieties presented by experience, or because they embody laws, or on account of their æsthetical [complementary] correlations; concern is directed either upon man as individual, or upon the moral persons of society, or upon the relations of both to the Absolute Person. Accordingly, there are six chief classifications for whatever may be of interest or concern: (1) Empirical interest in specific differences, the mind seizing upon nature in whatever way it may present itself. (2) Speculative interest as to the manner in which laws are realized, the mind endeavoring to discover the [necessary] connection between matter and form in nature. (3) Æsthetical interest in complementary and supplemental relations arising from the perception of the objective reality of the beautiful. The stages of "concern" are: (4) Sym-

pathetic concern in humanity as such, reproducing the longings discovered in human hearts without criticism and in the manner in which they are presented by society or the fine arts. (5) Civil, Political and Social concern [in co-operation by means of co-ordination and subordination.] (6) Religious concern originating when the concern for the whole is redistributed among the individuals by reflex considerations combined with the preceding stages of concern—both, therefore, interest in actions, as well as concern for motives take, in their lowest stage, what nature, society, humanity offer; both seem to lose themselves, the one in empiricism, the other in sympathies [and antipathies]. But the development of things urges both beyond these limits; empiricism is left behind by the [eternal] marvel (enigma) of creation; the free submission of society to law results from the [conviction that] conflict between might and right, between virtue and happiness, [cannot be settled] by merely sympathetic action. The spirit of freedom invents laws; speculation discovers laws. The whole heart is lifted to the recognition of the law identical in subject and object by the speculative freedom of æsthetical relations [in teleological organisms]; it is lifted by [universal] sympathy, as to the inadequacy between man's aspirations and his individual capacities, out of its bondage to the spiritual law of inertia, into—[transcendental liberty, into the necessary faith that man can commence anew upon an ever broader basis of thought and action, into the recognition of the remedial agency of the necessarily creative power of the Spirit, into]—Religion.

Instruction enriches and fecundates desire and ability by means of the stages of interesting knowledge; it leads, on the other hand, up to the other aim, to ethical judgment in treating matter of interest by the stages of concern. This is effected by the genetic reproduction of any work, exhibited in its essential stages of interest and concern, that is, by means of the construction of any systematic result of life presented exhaustively according to its [antithetical and synthetical] stages, in such a manner that the ideal correspondence between human freedom and action is reflected, either directly [by their agreement] or by their contrast. It would hardly do to take works of the present age for illustration; the sphere of the adult in an age of culture is too complicated and too much limited by conditions of life which we do not wish the pupil to understand even if we could render them intelligible. Classical representations of an idealized boy-

hood, such as are found in Homer's poems, especially in the *Odyssey*, are proper to begin with. Instruction in language even need not commence with Latin, but may begin with Greek, and proceed as speedily as possible to the study of the *Odyssey*, we mean, when the boy is just stepping out of the period in which care for his body engrosses the attention—say, at least before he has finished his tenth year.

[To be more general], the subject matter of instruction [for any age, whether of the pupil or of the country] has to be selected with reference to the fact how fully the objective and subjective unity of the faculties and the subordinate stages of interest and concern are represented by means of it. No factor, indispensably necessary for the maintaining of freedom at any given historical stage of the country, no science or art which is systematically developed and universally recognized should be excluded entirely. Notwithstanding the division of labor required for [the harmony of] life, talents, and inclinations, the conditions are offered for, and allowed to, one part of our youth a systematic culture of philological studies, [to-wit: a consideration of literary works from all stand-points of society] which may be more complete and fundamental [than that which is obtainable within the sphere of any one of the different organizations of society], while an education predominantly mathematical, and by means of the exact sciences, to the postponement of classical studies, in point of time and duration, is imperatively required for another portion of our young men. Higher schools may, therefore, be organized [by means of the method which engrafts the totality of the stages of any science or art without exhaustive treatment of the subdivisions] on such a plan that [after the encyclopædia of philosophy illustrated by means of the results of exact and historical sciences has been finished by all students] one set of classes carries to greater perfection the ideal and æsthetical culture of objective unities by means of thorough application of the principles of ancient literature; without, therefore, completely excluding the modern and realistic foundations [of inductive experiment], including mathematics and natural sciences—while the application of exact sciences may preponderate with another portion of students, the culture of ideals being, nevertheless, nurtured by application of modern languages and literature, especially by the use of the works of one's own country.

The business and the successive stages [recurring in each and every branch or topic] of instruction [whether belonging to exact sciences or otherwise] are, to exhibit [definite objectivity]—to engraft the same upon previous knowledge—to generalize the predicates separately for the purpose of obtaining their limits, to speculate [i. e., discuss the possibility, reality or necessity of constructions by means of predicates contradictory or contrary to the actual predicates of the thing exhibited].

[Likewise] in matters of ethical concern—to commence with a case in point—to engraft it upon the ethical functions *a priori*—to generalize into objective ethics of society—and to realize higher possibilities.

[All] instruction, therefore, presents objectivity, and the facts have to be narrated and pictured [as nearly as possible] in such a manner that the pupil may seem to see and hear what is only related and constructed, as if it were actually present. [Then and only then] should instruction proceed to analysis [and continue the latter solely] for the purpose of a higher synthesis. Concerning the sphere of empirical knowledge, analysis teaches qualities of things and divides into parts by means, and for the purpose of affixing signs and names—concerning speculation, it dissects observations to show the connection between purpose and means; concerning matters of ethical judgment, analytical instruction should take care that whatsoever is truly expressive of the idea be lifted out of its associations with what is immaterial, or imposing by physical proportions, or pleasing by changes without purpose; the master-pieces of nature offer abundant material, not more, however, than the life of man and society, to contrast what is sublime and good forever, with the reverse qualities; concerning sympathy for man, it should turn to historical and poetical representations of his [tragical or comical] actions, to give depth to the distinct emotions of compassion in the heart of the pupil; concerning the interest in social freedom, the attention should be extended to the variety of institutions required for its safety, and the necessity should be impressed upon the pupil that men have to adjust themselves and be mutually helpful, and that the forms of co-ordination and subordination arising from that source are not inconsistent with liberty of the individual [provided the individual lives the life of the whole in performing his duties like part of a machine]; concerning religion, humanity's utter dependence has to be shown [upon provisions

of nature without and within the individual], and also the weakness and limits [of actions contradictory to nature and right], and all exclusive reliance upon works, physical or social, own or foreign, instead of trust upon the purity of method or motive, has to be distinctly referred to the false and dangerous imagination of power [in any existence against the sleepless spirit of dialectic revolution].

The office of synthesis is, to arrange the possible combinations of the elements of culture [thus obtained].

The general process of synthesis, the mathematical operation of combination [to-wit: the juxtaposition of varieties and elimination of identities] corresponds to [the purpose of complementing] empirical observation. We find, among its applications, grammatical instruction [constructing new sentences by changing adjective and adverbial relations, tense, mode, voice, &c., into their opposites] and [the combination of opposite], arithmetical operations [e. g., "Grube's method"].

Speculative synthesis rests upon the correlation of comprehensions [by means of the ideas, according to which the totality is void when one factor is void] and this instruction [e. g. in the explanation of the Constitution] presupposes objective or visual apprehension of the speculative problem [e. g. of organic causality or teleology in science-lessons]; concerning æsthetical synthesis, instruction takes for pattern definite masterpieces of the various forms of art [such, e. g., as are contained in the readers, and changing the conditions of the persons or things treated of] combines with them the distinctively pleasing manner of presentation, as far as it can be perceived clearly, or gives and practices such variations directly, as in the variations of a musical theme, [or in those of inventive drawing].

Concerning sympathy for [progressive] men, synthetic instruction leads the pupil to discover in himself the germ of the most different failings and excellencies of struggling humanity [by the graphic and sympathetic rehearsal of their adversities and triumphs] and selects matter from the purest poets and historians [but above all, from the lives of those who discovered the facts and laws now taught in school, and who invented the tools of civilization, in order that, from the appreciation of the sacrifices made and the battles fought, the natural desire to go and do likewise, may gather strength].

As to concern for liberty of society, synthetical instruction

takes the ideas of co-ordination of men by inalienable rights, and subordination by corporations for special rights and duties from the analytical part, and shows that the conflicting [and disconnected] powers of societies are appeased and united [in proportion] as a special case of wrong or distress is both generalized and individualized [political freedom being the one self-remedial agency of all social ills, while the policy of despots and their schools, is to keep apart complementary opposites, faculties, people, or organizations].

Synthesis of religious instruction confines itself to the generalization of such a spirit of the family, as results from the harmonious co-operation of all ethical ideas; the family serves as type for analogies (symbol) concerning the purpose and spirit of the government of the world, and the explanation of the attributes of the Godhead is taken from the idealized qualities of parental care.

[A brief review will serve to clear up what follows :

It has been shown that all instruction is the result of three concurrent operations, namely :

(1) Of discipline, or limitation of one-sided thoughts, which are relatively too strong.

(2) Of training, or the exercise of complementary knowledge and skill, which are relatively too weak ; and

(3) Of government, or the joint application of the results of discipline and training.

To express the inseparable connection of the three operations, and for the sake of brevity, we may now call them by the term, under which they are known more widely ; for, from a psychological point of view, they appear to be essentially identical with the dialectical process.

To prove the necessity of dialectics for all instruction, it has been shown, by exhaustive analysis, that there is no kind of attention, and that there is no matter of interest, or concern, which does not contain the dialectical process, either explicitly or by implication.

To complete the argument, it is admitted that teaching can do no more than interfere, aid, or direct the education which the pupil would acquire without systematic help, but that this indissoluble union and reciprocity of interference, aid and direction, or dialectics, is the fundamental faculty, not only of the teacher, but of the pupil also, perfecting and uniting the secondary facul-

ties, each and all, whereas the common faculties of the soul, so-called, as also the ethical and æsthetical approval of harmonious opposites are classified results of dialectics applied to matter of experience, and that therefore neither memory, will, imagination, &c., nor the sense of rights, love, &c., and the like, can be cultivated directly without a more or less conscious application of dialectics. In other words, it can be shown, that the measure of success with which any one cultivates the faculties and ideas mentioned, is attributable to the degree in which he is a dialectician by nature, or training, and that any one, using dialectics, necessarily educates the above faculties and ideas.

The great obstacle to the plan of making every step of instruction an illustration of dialectics, and of thus developing truth and freedom together, is found in the inherited, and otherwise necessary division and subdivision of studies and lessons, by means of which different kinds of knowledge and skill are cultivated separately, and in such a manner, that, psychologically speaking, discipline and training preponderate, while government does not receive that share of time and attention which practical life and social freedom demand. The tendency of this oversight is more especially evident in schools above the grade of common schools, as tendency to impair directive energy, and to overtrain the analytical judgment of the understanding, at the expense of skill in using the knowledge so acquired.

The gist of the remedy proposed by Herbart is, to start from, and to return to concrete topics.

The topic, whether obtained by observation or by testimony of others, is the unit of operations, embodying the function of mental concentration.

To start from that unity of the topic, means to analyze the different parts, qualities, properties, actions, effects, purposes. The successive attention bestowed upon the grammatical or logical categories, as far as contained in the topic, is training; the exclusion of every other object and part, is discipline.

To return to the topic is, to find the complementary opposites embodied in other topics, and to enrich it by such association. This is termed synthetic instruction, and means composition, whether it is oral, as in lessons on natural science, or written, or by other means, as in the constructions of the Kindergarten and inventive drawing.

The most elementary application of the whole process is illus-

trated by the following method: An object is presented and analyzed orally; the word is then written by teacher and pupil in full; next comes the analysis of sounds and practice of the constituent letters. After a few words are fixed, the synthesis of the elements for new words commences].

Herbart's Pedagogics now proceeds to consider how directive force may be educated by means of written compositions:

The term [dialectic] training embraces all direct action upon the disposition of the pupil which is prompted by the intention to purify and supplement his energies, and to lead him towards objective liberty. Dialectic training has to deal [with the limitations of the person fixed by way of inheritance or association] or, in other words, it has to deal with the character of man. Character manifests itself by individual preferences [and is twofold, either objective or subjective. The objective portion or factor of character consists of] the individual's particular construction of inclinations, indicated by the relative proportion or percentage of action; the subjective factor of character consists in the enjoyment of complementary opposites criticizing the individual inclinations. The historical conception of both our objective and subjective character (*Sitz* = centre of geometrical locus) constitutes the totality of actual energy, and this is produced continuously by means of complementary natural desires into acts of responsibility. The difference of the causes where-with persons identify themselves, defines such or another character. It is, nevertheless, the internal act, as described, whether purely internal or whether conceived as possibly external, which produces balanced energy out of the material of desires [in every species of character].

Faculty, [i. e., power of one of the complementary opposites which would act independently if it was not restrained and directed] is, without doubt, the condition of acts of responsibility, and [adopting this definition of faculty, we see that] every individual is peculiarly endowed or disposed, according to the physical constitution of his body, according to the conscious connection of his personality with his habits of thought, and according to the relation of these mental habits among each other, character gradually develops and matures [by suppressing dispositions which are relatively too strong, and training such complementary inclinations as are relatively too weak.] [Hence we perceive that] opportunities, influence of the mode of living, influence of

the sphere of thought, are of essential importance for the culture of character [though it is quite as evident, that they are of such importance as means for developing freedom, but are not to be regarded as independent or necessary causes of action].

Among psychical actions which develop character, is foremost "the memory of will" [the knowledge that the higher unity, in favor of which insubordinate attention, affections, or energies have suppressed, retains and embodies said energies unimpaired, though the latter have been disengaged from the objects to which they were attached originally]; this kind of will [the unity of sacrifice and faith] must manifest itself without a process of reasoning (or categorically), as often as occasion requires [that is, as often as any desire exhibits the tendency to throw off subordination to conscience] if such a conception as character involves may be realized, [i. e., a perfectly free and perfectly reliable person].

One of the following stages of this process is the act of choice, that is, preference [to unity] and subordination [of preparatory extremes]: this act of choice settles the gradation of energy, it imparts organic or systematic construction to the inclinations, it attaches limited valuation to each separate act, and each separate cause of action, rendering the person aware of the relation between what he ought and ought not to sacrifice, between what he ought and ought not to own, or, between what he ought and ought not to do.

Objective freedom [or harmony of the individual will with nature, and with the will of society] by means of the ethico-æsthetical judgment appears to be a third stage of the process, though it [is manifest that the susceptibility and attention for what is good and beautiful is in reality the reward for rejecting what appears to be otherwise, and that this act of rejecting] precedes and determines the act of choice. The act of identifying one's moral self with a cause follows next [or the determination to stand, fall and rise with said cause] accompanied by the definite knowledge of the duties, responsibilities and sacrifices involved, and is succeeded, finally, by self-observation, [or scrutiny how far our acts are expressive of moral resolutions, and in case of inadequacy] by reaffirmation of the original resolution against further obstacles.

The individual is thus carrying on a policy at once conservative [the energies not being impaired by suppressing or govern-

ing the objects of one-sided tendencies], restorative [in training functions weakened by the overgrowth of others], and reformatory [by concentrating the energies thus controlled and trained upon the right cause]—in fine, the individual is carrying into effect the true principle of self-education.

An enlightened warmth for acts of objective liberty, unabated by selfish desires, compatible alike with courage and prudence, by means whereof the truth of objective liberty becomes an individual impersonation, cannot grow out of any root other than the power of faith, which leads to sacrifice for duty's sake, resulting from ethical application of dialectics.

Distinct measures of dialectical training [to be carried into effect by the teacher in separate lessons] are required, on account of faults inherent in all schooling [more particularly in schooling of a higher order, where the culture of directive energy by means of composition is not made the leading aim, and the necessary faults referred to arise from the fact that systematic excellence in the plan of studies, together with the best possible standard in the separate lessons, cannot alone, and without aid from systematic use of knowledge in lessons on composition, overcome the discrepancy between the claims of practical life and the one-sided culture of theoretical or abstract judgment, which results from any division of labor by means of teachers, subject-matter, time and methods, without adequate and scientific correction].

Measures of dialectical training are also required for realizing the general purposes of education [to-wit: the perpetuation of justice and freedom. The future juror should practice the art of looking at opposite phases of a fact without bias; the future citizen might, in some degree, be prepared to give a fair hearing to opposite views advanced by different papers and parties, without introducing political or religious questions into schools; and, why should the future legislator not contract the habit of looking at the consequences of an act from different stand-points, even in his youth? Or, how is the foundation of constitutional liberty to remain intact, if the harmonious co-operation of the judicial, executive and legislative functions in the individual is weakened, instead of carefully trained?]

Among measures for dialectical training of an external nature, we find, first and foremost, the deportment of the teacher towards the pupil, [the balanced harmony of firm self-esteem for

discipline and kind self-forgetfulness for training, representing, as well as circumstances permit, the power from which his share of authority is delegated]; after that, the degree to which the teacher permits or refuses [the pupil's individuality and circumstances to modify the application of prescribed laws], and, consequently, the consistency with which he aims to produce methodical habits of thought, or to cancel habits which interfere: training is, in this last case, [manifestly] combined with discipline [suppression of wrong, or faulty use of faculties], but is distinguished from the latter by its aim, to apply the faculties, which have been set free, for the appropriate object. ["Use your anger for your problem"—said Stonewall Jackson, as professor of mathematics].

[Hence it appears that dialectical training, or rather government, consists in this: to concentrate different and opposite knowledge and skill upon imperfect work, for the purpose of transforming such work until it exhibits conformity with the ethical ideas. The illustration, most widely accepted, is the solution of equations, by means of their transformation. But, inasmuch as the ethical ideas of Right, Equity, Love, Freedom and Perfection result from, and express the process of dialectics applied to finite objects, dialectical government may be defined more briefly, as the aid afforded by the teacher to the scholar to transform imperfect work by means of dialectics.

Dialectic government subserves the following purposes essential to education:

(a) Dialectic government prepares a proper disposition for [subsequent] instruction. [Analysis and criticism of imperfect, one-sided, incomplete work, creates demand for a higher, more complete and harmonious unity].

(b) Dialectic government gives distinctness and balance to the scholar's natural aspirations [in presenting and explaining the harmonious relations of the comparatively perfect work] in such a manner that the ethical and æsthetical conception and approval is freed from opposing predilections.

(c) Dialectic government affords time for the various germs of ethical conception to develop according to the individuality of the scholars [by comparing the different properties of the less perfect work (a) with the qualities of the higher treatment or unity (b)] and assists by means of correcting or generalizing the judgment.

(d) Dialectic government helps the scholar to cultivate the "memory of will" [inasmuch as any lesson or composition treated dialectically, affords an additional illustration of the principle that nothing is lost by suppressing attachment to one-sided extremes in favor of a higher unity].

(e) Dialectic government observes, nurtures, cultivates and directs the spirit of sacrifice, of acquisitiveness, of industry, and prompts the pupil to choose [the more concrete conception, treatment and comprehension, because the higher unity contains greater possibilities and is in consonance with duty].

(f) Dialectic government regulates [the adjustment of ethical ideas] when one-sided dispositions of the scholar are formulated as maxims or principles, and the subjective factor of character preponderates [by criticism of the one-sided and composition of the balanced character].

(g) Dialectic government quickens the voice of conscience, [whenever the might of passion is seen to crush the right of the complementary opposite, and thus to arrest the dialectic progress toward higher unity].

(h) Dialectic government aims to fix the system of ethical doctrines adopted in recognized text-books as a system of actual freedom with which the scholar may be in hearty accord, and to bring it about that the culture thereof and its actual realization may appear to him as the most important concern of his after life.

[It is not denied that unlimited freedom of inquiry into facts, and unlimited publication of truth, by means of the press, cannot be restricted without danger to right, freedom and progress. Freedom of speech and of science are held sacred for the defense of truth, right, charity, liberty and progress; that freedom is, however, not upheld against the ethical ideas named. The ethical ideas are the acknowledged and constitutional support of the free press. The support and superstructure contract and expand together, as a matter of history. It is evident to common sense that the comparative strength of ethical and selfish tendencies in the individual and the community determines how far inquiry into the truth of facts will be pushed, and how soon it will be abandoned. If, then, freedom of the press and strength of moral freedom in the community stand and fall together, it is the right and duty of the press, as an act of self-preservation, to insist that ethical instruction and practice, by

means of composition or otherwise, be introduced into the schools of the people. But when these ideas of Right and Equity, of Love, and Freedom, and Perfection, are shaped into an eye, to see with, to sift, to complement, to embrace, to recognize experience, such eye is called Dialectics. It is true, dialectics may result, without ethics, in sophistry. But let dialectics, regulated by ethics, be welcomed. For what are ethics, without dialectics, but a series of commands, which do not impart the ability to obey?]

Finally: (i) Dialectic government fosters grateful acknowledgment of, and glad submission to the necessity of complementary arrangements in nature and society, without which individual life could not be sustained, and actions, whether good or bad, could yield no returns, but it fosters such tendencies solely by the results of undoubted experience and by matter of instruction universally recognized, in order to protect [the religious germ] against that superficiality [which is satisfied with pious imagery without making use of complementary relations for better work or broader knowledge] and against that despotic extravagance [which under cover of some theory, would substitute a mediator between man and the Author of all providential arrangements, other than the eternal law of mind. Dialectics, for the same reason, disclaim affinity with physical or dogmatical assumptions which destroy or impair the responsibility of man. But responsibility is impaired to the extent to which any belief is strengthened against the axiomatic faith of dialectics, that everything returns to its author. Dialectic government harmonizes with true religion, representing such faith, and calling upon men to do as they wish to be done by], it points to such religion as the condition of virtue and true knowledge.

[The educational value of speculative philosophy since Kant, results from its systematic effort to separate morality from creeds and churches, in order to evade the dilemma spoken of; the special value of Herbart's *Pedagogics* consists in the fact that it is an attempt to demonstrate the necessity and feasibility of making morality the aim and end of public education, while he insists upon a separation of moral principles from dogmas of any and every kind, in the most uncompromising manner.

Reading, writing and arithmetic, classics and mathematics, natural science and history may, do and did serve, not only the cause of freedom, but all manner of evil. We feel interest in

the question, how sciences and arts may best serve the cause of freedom; for the discussion of this question elevates the profession of teaching from the consideration of very trivial matters to that of a sublime theme, even in case no result of economical value should be apparent at the outset. The general plan also of the foundation appears to be quite simple. If we take a free act to be an act of choice effected in accordance with our inbred desire for unlimited progress, we exclude wrong, i. e., choice inconsistent with the general conditions of life; we exclude whatever does not yield an equitable return and also any choice without general validity under like circumstances, or choice without love. For all such choice limits or defeats progress. And to arrive at a decision as to what is preferable relatively, it seems that the preference given must result from quality or quantity, and that, in either case, that must be preferable which contains and includes the other. But to exclude such a choice, the general reflex action of which would be self-destructive, and to include in the choice the self-limiting extremes is, at once, application of all the above principles of ethics. But this operation is precisely what we mean by dialectics: dialectics, therefore, are the method by means of which ethical principles apply themselves, as it were. Nothing further is needed, no new set of rules to apply dialectics. The attempt to educate the will by teaching a system of moral philosophy would be as ridiculous as the attempt to teach a foreign language by means of a scientific grammar. Both things are done, but Herbart is radically opposed to trifling away time and strength in such a manner. Educate by means of instruction says: help the scholar to choose, to reject the errors and mistakes which, happily, make their appearance in pairs, to seek and present facts which belong together essentially, to find the harmonious unity, to prefer the more concrete to the more abstract; it says: cultivate his practical judgment, determine his choice in accordance with moral principles, enlarge and intensify freedom by means of dialectics.

We are referred to his psychology for further information. This information is two-fold. We learn first, that any and every theory, true or false, may be supported by the theory of inbred faculties. Let us be miseducated first, and it will be easy to find the predetermined germ therefor in consciousness. Let us suppose our miseducation and complementary faculties will be developed by susceptibility for complementary truths. What we

may be, can be determined only by actual trial, and such trial is either the categorical assertion of some one-sided abstraction, faculty and habit, or the exercise of freedom; the former weakens and its objects fade, as the tediousness of each repetition increases; the latter is the true progress *in infinitum*, gathering strength by every complement of our individuality.

We learn, secondly, as a positive result, that the categories of *being*, *essence* and *morality* are the true primary faculties ("Psychology based upon Metaphysics") these categories being necessarily involved in the idea of free personality, but that no one can know their full stretch nor their joint intensity without first using them separately and jointly. Do, and you will know; act first, reflect upon it afterwards; art precedes its theory; not only the binomial theorem has been discovered in this manner, but every valuable generalization has been effected by developing the possibilities of isolated cases. It would, of course, be utter perversion to apply this precept to physical as well as to mental action, or to admit it with reference to the latter when not controlled by moral principles. To act physically without having used our reason, and to use our reason independently of our conscience, is the very origin of crime and sin, which education seeks to prevent.

As result of the application of moral principles to our sensuous or immediate conceptions by means of dialectics, we obtain the theory of attention substantially as follows: Let every conception be analyzed by as many primary faculties or categories as possible. The object presents the unity of these faculties, and such apparent analysis is, in fact, synthesis, and culture of directive energy, but is termed accidental view, because it does not exhaust the categories. This being done, we have a common measure; quantitatively, we may compare one thing and another by means of the same category; qualitatively, we may compare one thing or person and another by the number of categories inhering in the same, or the exponent of concreteness. We educate the primary faculties separately by quantitative comparison, we educate them jointly by qualitative comparison, and educate self-consciousness by means of both. We commence by concentrating our attention upon objects, we end by concentrating it upon the subject: self-application terminates in self-recollection; instruction in education; between the original and final synthesis we have comparison as means.

Synthesis in the object is instruction; union of categories in the purpose is moral discipline; comparison by means of methodical review is government.

All interest results from the reciprocal influence existing between object and purpose by means of thoughts. If change of objects enlarges or restricts the scope of purpose, we have æsthetical interest, if change of purpose increases or diminishes the sphere of experience, we take empirical interest; the methods of reflection, by means of which the bonds of reality and purpose may be loosened or tightened constitute our speculative interest.

These bonds are, correspondingly, practical judgment, comprehension and conclusion. The exercise of each and all of them depends upon the faculty of faculties, to be able to conceive the opposite properties, attributes and actions comprised by the things or persons which we apprehend by senses, thoughts or conscience. Logic tells that there is no logic without freedom. To every focus of predicates may correspond a focus of opposite predicates, and foci containing the means. Truth realizes the possibilities of freedom, if freedom is the motive power for the discovery of truth.

But every truth now taught, and every safeguard of freedom now enforced, is a legacy left to us by men who believed in infinite progress, and, therefore, stepped over the boundaries of the past. They educated themselves not by "culture studies," but by identifying the development of their faculties with the realization of a moral purpose. To teach in their spirit, instruction and education is inseparable. A general outline of the applicability of this principle is obtained by the reflection that all instruction concerns persons or things and their relations, while faculties are developed by actions. Things may be considered, *a priori*, in themselves (natural history), in their relation to each other (physics), and in their relation to us (geography.) The knowledge of persons is exhausted, correspondingly, by the knowledge of their characters, their relations in society, and their historical stand-point. It has been explained that matter of instruction, whether relating to things or persons, may be prepared, by means of analysis and comparison, in such a manner that an involuntary judgment is elicited from the scholar as to their comparative value and worth. Nor need we fear to prejud-

dice him, if we confine ourselves to preferences settled by arithmetic and the constitution. But it is to be feared that the mere mass of empirical knowledge, without such aim in view, may crush instead of developing the faculty to use it.

On the other hand, reading, writing and arithmetic, spelling, grammar, and the like exercises of indispensable faculties, should, it is contended, be joined, as directly as possible, with the desire to impart useful information. This, we may take to be the settled conviction of our age. The cry against culture studies unites the most extreme parties. Many things are being done in this direction, but nothing will give thorough satisfaction, unless we unite them by means of composition. Most schools will discover some useless culture studies, for which composition may be substituted profitably.

The purpose for which composition is recommended would be defeated, if form and matter were separated, if the matter were not elicited by questions, and the form were empirical analysis, instead of harmonious synthesis.

Analogies are the gems of diction, the source of mental fertility, the key to the secret, how one set of faculties educates another. By analogy we understand the reciprocity or reflex-action by means of which the correspondence between things or persons is discovered. To develop a fruitful analogy is an exercise which, by its very nature, sets all our faculties, moral, mental and sensuous, to work; it is competitive comparison; it is the flower of dialectic discipline. Papers and books teem with excellent analogies; let us use this wealth in exercises of composition to educate the desire for progress, freedom and truth].

THE TWO GENTLEMEN OF VERONA.

BY D. J. SNIDER.

This is no doubt one of the youthful plays of Shakespeare. Its theme is the passion of youth, fullness and warmth charac-